

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. **Claim 6 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.**

The claim recites a computer program per se. Computer programs per se, not stored on a computer readable medium, are abstract ideas. Computer programs per se are not capable of performing any function (See MPEP 2106).

It is suggested that the preamble be amended to recite, "A non transitory computer recording medium having stored thereon a computer program product that is processed by the computer comprising..."

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. **Claims 1, 3 and 4-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Tai (U.S. Patent No. 6477314).**

5. **Regarding claim 1, Tai teaches an image processing apparatus comprising:**

- Detecting means for detecting coordinates on a small screen for displaying a small image including predetermined coordinates on a large screen for displaying a large image comprising a plurality of small images disposed at predetermined positions, said coordinates on said small screen corresponding to said predetermined coordinates on said large screen

: The input means 1311 inputs a number of regions (A-C, FIG.5) and the respective boundary coordinates (col. 2, line 53 – col. 3, line 17). Or in the automatic mode the partitioning means 1312 automatically (**predetermined**) generates parts F1, F2, F3, F4 based in the input of the input means that form a larger image shown in FIG.6 (col. 2, line 53 – col. 3, line 17). Either the regions of FIG.5 or parts of FIG.6 are the equivalent to the claimed **plurality of small screens**. The retrieving means 132 retrieves from the video buffer 12 (FIG.4) a segment of image data that correspond to a position in the display monitor 11 (**large screen**). Clearly the segment of the regions or the parts in FIG.5 & FIG.6 corresponds to a position in the larger image.

- Reading means for reading a pixel value of a pixel of the predetermined said small image, said pixel being located at a position corresponding to the coordinates on said small screen detected by said detecting means

: The processing unit 13 reads the stored image information from the data storage device 14 to the video buffer 12, which is then displayed on the display 11 (col. 3, line 18-25, FIG.1).

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As stated above, the pixel position (coordinate) in the video buffer correspond to the position in the display 11 (FIG.4).

- Outputting means for outputting said pixel value read by said reading means as a pixel value of a pixel of said large image, said pixel being located at a position corresponding to said predetermined coordinates on said large screen

: As stated above, the processing unit 13 reads image information to be displayed (output) by the display 11 (outputting means).

6. **Regarding claim 3**, Tai teaches the image processing apparatus as claimed in claim 1,

- Wherein said small image is an image corresponding to a picked-up image obtained as a result of image pickup by an image pickup device (cameras 2 (FIG.1 & col. 2, line 32-37))

7. **Regarding claims 4-6**, claims 4-6 are similar in scope to the claim 1.

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Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. **Claims 2, 7, 8 and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tai as applied to claims 1 above, and further in view of Inagaki et al. (U.S. Patent No. 6657637).**

10. **Regarding claim 2**, Tai teaches:

- Storing means for storing the coordinates of said large screen, the coordinates on said small screen including the coordinates on said large screen, said coordinates on said small screen corresponding to the coordinates on said large screen, and information for identifying said small image to be displayed on said small screen are associated with each other,
: Based on the rejection above, the video buffer 12 comprise of coordinates of the small screen (regions and parts of FIG.5-6) and the large screen (the entire screen of display 11. Therefore, the coordinate position of the small screen directly corresponds to the large screen. All the image coordinate information is stored in the storage device 14 for later retrieval for display (Tai: col. 3, line 18-25).
- Wherein said detecting means detects the coordinates on said small screen including said predetermined coordinates on said large screen, said coordinates on said small screen corresponding to said predetermined

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coordinates, from the storing means

: As stated above, the processing unit 13 retrieves the image information from the storage device 14 (also see FIG.1).

- Said reading means reads the pixel value of the pixel of said small image identified by the information for identifying said small image, said information being associated with said predetermined coordinates in said storage device, said pixel being located at the position corresponding to the coordinates on said small screen detected by said detecting means

: Also stated above, the processing unit 13 reads image information to be displayed (output) from the storage device 14, which is output by the display 11.

However, Tai does not expressly teach:

- Storing means for storing a table

Inagaki teaches:

- Storing location coordinates for display as a table in a data storage unit 102
(Inagaki: col. 11, line 17-25)

Therefore, at the time of the invention, it would have been obvious to one of an ordinary skill in the art to store the image information of Tai in the storage device of Tai in the form of a table as taught by Inagaki, ***because this is just one of the many ways of storing information in a database and such usage of a table enable quick and easy access to data.***

11. **Regarding claims 7, 10-12**, claims 7, 10-12 are similar in scope to the combination of claims 1 and 2.

12. **Regarding claim 8**, claim 8 is similar in scope to the claim 3.

13. **Claim 9 is rejected under 35 U.S.C. 103(a)** as being unpatentable over Tai in view of Inagaki as applied to claim 8 and further in view of Chiba (PGPUB Document NO. US 2002/0109833).

14. **Regarding claim 9**, referring to the rejection above with respect to claims 1 and 2, the combined teachings of Tai and Inagaki teach the limitations of claim except:

- Being subjected to a correction on a basis of a condition of an optical system

However, Chiba teaches:

- A lens distortion correction process before the image combining processing 5
(Chiba: ¶0078, FIG.8)

Therefore, at the time of the invention, it would have been obvious to one of an ordinary skill in the art to apply the lens distortion correction process of Chiba to the

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combined teachings of Tai and Inagaki, ***because this enables a more accurate representation of the captured image.***

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID H. CHU whose telephone number is (571) 272-8079. The examiner can normally be reached on M-F 9:30am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung can be reached on (571) 272-7794. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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